

SEQUENCE LISTING

SEQ ID NO:1

human IRAK-4 amino acid sequence

5 MNKPITPSTYVRCLNVGLIRKLSDFIDPQEGWKKLAVAIKKPSGDDRYNQFHRRF
EALLQTGKSPTSSELLFDWGTTNCTAGDLVDLLIQNEFFAPASLLLPDAVPKTANT
LPSKEAITVQQKQMPFCDKDRTLMTVPQNLEQSYMPPDSSSPENKSLEVSDTRFH
SFSFYELKNVTNNFDERPISVGGNKMGEFGVYKGYVNNTTVAVKKLAAMV
DITTEELKQQFDQEIKVMAKCQHENLVELLGFSSDGDDLCLVYVYMPNGSLLDR
10 LSCLDGTPLSWHMRCKIAQGAANGINFLHENHHIHRDIKSANILLDEAFTAKISD
FGLARASEKFAQTVMTSRIVGTTAYMAPEALRGEITPKSDIYSFGVVLEIITGLPA
VDEHREPQLLLDIKEEIEDEEKTIEDYIDKKMNDADSTSVEAMYSVASQCLHEKK
NKRPDIKKVQQLQEMTAS

15

SEQ ID NO:2

human IRAK-4 cDNA sequence

ATGAACAAACCCATAACACCATCAACATATGTGCGCTGCCTCAATGTTGGACT
20 AATTAGGAAGCTGTCAGATTTTATTGATCCTCAAGAAGGATGGAAGAAGTTA
GCTGTAGCTATTAAAAAACCATCTGGTGATGATAGATAACAATCAGTTTCACAT
AAGGAGATTTGAAGCATTACTTCAAACCTGGAAAAAGTCCCACTTCTGAATTA
CTGTTTGACTGGGGCACCACAAATTGCACAGCTGGTGATCTTGTGGATCTTTT
GATCCAAAATGAATTTTTTGTCTCCTGCGAGTCTTTTGCTCCAGATGCTGTTCC
25 CAAAACCTGCTAATACTACCTTCTAAAGAAGCTATAACAGTTCAGCAAAAA
CAGATGCCTTTCTGTGACAAAGACAGGACATTGATGACACCTGTGCAGAATC
TTGAACAAAGCTATATGCCACCTGACTCCTCAAGTCCAGAAAATAAAAGTTT
AGAAGTTAGTGATACACGTTTTTCACAGTTTTTCATTTTATGAATTGAAGAATG
TCACAAATAACTTTGATGAACGACCCATTTCTGTTGGTGGTAATAAAATGGGA
30 GAGGGAGGATTTGGAGTTGTATATAAAGGCTACGTAAATAACACAACTGTGG
CAGTGAAGAAGCTTGCAGCAATGGTTGACATTACTACTGAAGAAGTGAACA
GCAGTTTGATCAAGAAATAAAAGTAATGGCAAAGTGTCAACATGAAAACCTTA
GTAGAACTACTTGGTTTCTCAAGTGATGGAGATGACCTCTGCTTAGTATATGT
TTACATGCCTAATGGTTCATTGCTAGACAGACTCTCTTGCTTGGATGGTACTC

CACCACTTTCTTGGCACATGAGATGCAAGATTGCTCAGGGTGCAGCTAATGGC
 ATCAATTTTCTACATGAAAATCATCATATTCATAGAGATATTAAGTGCAA
 TATCTTACTGGATGAAGCTTTTACTGCTAAAATATCTGACTTTGGCCTTGCAC
 GGGCTTCTGAGAAGTTTGCCAGACAGTCATGACTAGCAGAATTGTGGGAAC
 5 AACAGCTTATATGGCACCAGAAGCTTTGCGTGGAGAAATAACACCCAAATCT
 GATATTTACAGCTTTGGTGTGGTTTTACTAGAAATAATAACTGGACTTCCAGC
 TGTGGATGAACACCGTGAACCTCAGTTATTGCTAGATATTAAGAAGAAATT
 GAAGATGAAGAAAAGACAATTGAAGATTATATTGATAAAAAGATGAATGAT
 GCTGATTCCACTTCAGTTGAAGCTATGTACTCTGTTGCTAGTCAATGTCTGCAT
 10 GAAAAGAAAAATAAGAGACCAGACATTAAGAAGGTTCAACAGCTGCTGCAA
 GAGATGACAGCTTCTTAA

SEQ ID NO:3

15 murine IRAK-4 amino acid sequence

MNKPLTPSTYIRNLNVGILRKLSDFIDPQEGWKKLAVAIAKKPSGDDRYNQFHRRF
 EALLQTGKSPTCELLFDWGTTNCTVGDLDLLVQIELFAPATLLLPDAVPQTVKS
 LPPREAATVAQTHGPCQEKDRTSVMPMPKLEHSCEPPDSSSPDNRSVESSDTRFH
 20 SFSFHELKSITNNFDEQPASAGGNRMGEGGFVVYKGCVNNTIVAVKKLGAMVE
 ISTEELKQQFDQEIKVMATCQHENLVELLGFSSDSNLCVYAYMPNGSLLDRLS
 CLDGTPPLSWHTRCKVAQGTANGIRFLHENHHIHRDIKSANILLDKDFTAKISDFG
 LARASARLAQTVMTSRIVGTTAYMAPEALRGEITPKSDIYSFGVVLLELITGLAAV
 DENREPQLLLDIKEEIEDEEKTIEDYTDEKMSDADPASVEAMYSAAQCLHEKKN
 25 RRPDIKVQQLQEMSA

SEQ ID NO:4

mouse IRAK-4 cDNA sequence

30 GCGGCCGCGTCGACATGCCCCGGTGACCCGCAGCATCCCGATCGCAGGCAGT
 CTGAAGTCGCCTGGTGGTCCTGCGTCCTCCACCCCCGAGTCCTCGCCGGACGT
 GGCGGGACGCCGATCGCCTTGTCAGGAAGCGAGGGACGTCCGAGAGGAAG
 TAGAAGATGAACAAGCCGTTGACACCATCGACATACATACGCAACCTTAATG
 TGGGGATCCTTAGGAAGCTGTCGGATTTTATTGATCCTCAAGAAGGGTGAA

GAAATTAGCAGTAGCTATCAAAAAGCCGTCCGGCGACGACAGATACAATCAG
 TTCCATATAAGGAGATTCTGAAGCCTTACTTCAGACCGGGAAGAGCCCCACCT
 GTGAACTGCTGTTTGACTGGGGCACCACGAACTGCACAGTTGGCGACCTTG
 GATCTACTGGTCCAGATTGAGCTGTTTGCCCCGCCACTCTCCTGCTGCCGGA
 5 TGCCGTTCCCCAAACCGTCAAAAGCCTGCCTCCTAGAGAAGCGGCAACAGTG
 GCACAAACACACGGGCCTTGTCAGGAAAAGGACAGGACATCCGTAATGCCTA
 TGCCGAAGCTAGAACACAGCTGCGAGCCACCGGACTCCTCAAGCCCAGACAA
 CAGAAGTGTAGAGTCCAGCGACACTCGGTTCCACAGCTTCTCGTTCCATGAAC
 TGAAGAGCATCACAAACAACCTTCGACGAGCAACCCGCGTCTGCCGGTGGCAA
 10 CCGGATGGGAGAGGGGGGATTGAGTGGTGTACAAGGGCTGTGTGAACAAC
 ACCATCGTGGCGGTGAAGAAGCTCGGAGCGATGGTTGAAATCAGTACTGAAG
 AACTAAAGCAACAGTTTGATCAAGAAATTAAAGTAATGGCAACGTGTCAGCA
 CGAGAACCTGGTGGAGCTGCTCGGCTTCTCCAGCGACAGCGACAACCTGTGC
 TTAGTGTATGCTTACATGCCCAACGGGTCCTTGCTGGACAGACTGTCCTGCCT
 15 GGATGGTACACCACCGCTTTCCTGGCACACAAGGTGCAAGGTTGCTCAGGGG
 ACAGCAAATGGCATCAGGTTTCTGCATGAAAATCATCACATTCATAGAGATA
 TTTAAAGTGCAAATATCTTACTAGACAAAGACTTTACTGCCAAAATATCTGAC
 TTTGGGCTTGACGGGCTTCGGCAAGGCTAGCGCAGACGGTCATGACCAGCC
 GAATCGTGGGCACAACGGCTTACATGGCACCCGAAGCTTTGCGGGGAGAAAT
 20 AACACCCAAATCTGACATCTACAGCTTCGGCGTGGTTCTGTTGGAGCTGATAA
 CCGGGCTGGCGGCTGTGGATGAAAACCGTGAACCTCAACTACTGCTGGATAT
 TAAAGAAGAGATTGAAGATGAAGAGAAGACGATTGAAGATTACACGGATGA
 GAAGATGAGCGATGCGGACCCTGCTTCGGTGAAGCAATGTACTCTGCTGCT
 AGCCAGTGTCTGCATGAGAAGAAAAACAGACGGCCAGACATTGCAAAGGTTC
 25 AACAGCTGCTACAAGAGATGTCTGCTTAA

SEQ ID NO:5

Sense primer for amplification of human IRAK-4

30

ATGAACAAACCCATAACACCATCAACATATGTGC

SEQ ID NO:6

Antisense primer for amplification of human IRAK-4

TTAAGAAGCTGTCATCTCTTGCAGC